



Microgram

Bulletin

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- OCTOBER 2010 -

SELECTED REFERENCES

[The Selected References section is a compilation of recent publications of presumed interest to forensic chemists. Unless otherwise stated, all listed citations are published in English. Abbreviated mailing address information duplicates that which is provided by the abstracting service. Patents and Proceedings are reported only by their *Chemical Abstracts* citation number.]

1. Epplé R, Blanes L, Beavis A, Roux C, Doble P. **Analysis of amphetamine-type substances by capillary zone electrophoresis using capacitively coupled contactless conductivity detection.** *Electrophoresis* 2010;31(15):2608-2613. [Editor's Notes: CE with capacitively coupled contactless conductivity detection (C⁴D) was employed for the separation and detection of seven amphetamine analogs as well as amphetamine, dextroamphetamine, methamphetamine, and MDMA. The separation electrolyte was 30 mM hydroxypropyl- β -cyclodextrin (HP β CD) in a 75 mM acetic acid+25 mM sodium acetate buffer adjusted to pH 4.55. Conductivity detection was compared with UV detection using this electrolyte. Average detection limits for C⁴D and UV were 1.3 and 1.0 ppm, respectively. The effects of HP β CD concentration and BGE composition on the selectivity of the separation were also investigated. An illicit sample of MDMA (ecstasy) and a prescription dextroamphetamine tablet were also analyzed. Contact: Centre for Forensic Science, Department of Chemistry and Forensic Science, University of Technology Sydney (UTS), Sydney, Australia.]

2. Weston RG. **Quick screening of crystal methamphetamine/methyl sulfone exhibits by Raman spectroscopy.** Journal of Forensic Sciences 2010;55(4):1068-1075. [Editor's Notes: The analysis of mixtures of "crystal meth" (usually comprised of methylsulfone [MS] and methamphetamine [MA]) by gas chromatography/mass spectrometry (GC/MS) is routine in many forensic drug labs. The utilization of Raman spectroscopy for the identification of such mixtures quickly and without the need for a separation technique is discussed. Samples were dissolved in water and Raman spectra of the resulting aqueous solutions were collected. By comparing these spectra to spectra of MS and MA mixtures of known composition, an indication of the composition of the sample can be obtained in only a few minutes. This spectral comparison also can be used as a semi-quantitative analysis of MA concentrations in such exhibits. Contact: Oklahoma State Bureau of Investigation, Edmond, OK 73034, USA.)

Additional References of Possible Interest:

1. Fegas R, Bensalem A, Bettache Z, Righezza M. **Simultaneous separation of quinine and its diastereoisomer quinidine by RP-HPLC.** Asian Journal of Chemistry 2010;22(2):1587-1590. [Editor's Notes: Presents Title Study. Contact: Laboratoire de la police scientifique Alger, Algeria.]
2. Sacre P, Deconinck E, De Beer T, Courselle P, Vancauwenberghe R, Chiap P, Crommen J, De Beer JO. **Comparison and combination of spectroscopic techniques for the detection of counterfeit medicines.** Journal of Pharmaceutical and Biomedical Analysis 2010;53(3):445-453. [Editor's Notes: Presents Title Study. Contact: Laboratory of Drug Analysis, Scientific Institute of Public Health, Rue Juliette Wytsmanstraat 14, Brussels 1050, Belgium.]
3. Vardakou I, Pistos C, Spiliopoulou Ch. **Spice drugs as a new trend: Mode of action, identification and legislation.** Toxicology Letters 2010;197(3):157-162. [Editor's Notes: Presents Title Study. Contact: Department of Forensic Medicine and Toxicology, School of Medicine, National and Kapodistrian University of Athens, Athens 115 27, Greece.]

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THE JOURNAL/TEXTBOOK COLLECTION EXCHANGE

The Journal/Textbook Collection Exchange is a service intended to facilitate the transfer of unwanted journals and textbooks to forensic libraries or other *Microgram* subscribers. The current donations are listed below. The offers are First Come/First Serve (except **libraries have preference**). There are no charges to the requestor. Please provide a full mailing address in the request. **Important!:** Do not provide an address that irradiates mail!

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1991: March (#2)

1992: January (#1), March (#2), July (#4), September (#5), November (#6)

1993: January (#1), March (#2), May (#3), July (#4), September (#5)

1998: September (#5)

Journal of Forensic Sciences:

2000: January (#1), March (#2), May (#3), July (#4), September (#5)
2001: Complete set
2002: Complete set
2003: Complete set
2004: Complete set
2005: Complete set
2006: Complete set
2007: January (#1), March (#2), November (#6)
2008: Complete set
2009: Complete set

Forensic Science Review:

1999: December (#2)
2000: January (#1-2)
2006: January (#1), July (#2)

Forensic Science International:

2004: July (#2-3), August (#1), October (#2-3), November (#1), December (#2-3),
December (Supplemental)
2005: January (#1), January (#2-3), March (#2-3)

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THE DEA FY 2011 STATE AND LOCAL FORENSIC CHEMISTS SEMINAR SCHEDULE

The FY 2011 schedule for the State and Local Forensic Chemists Seminar is as follows:

March 7-11, 2011
June 6-10, 2011
September 12-16, 2011

The school is open only to forensic chemists working for law enforcement agencies. It is intended for chemists who have completed their agency's internal training program and have also been working on the bench for at least one year. There is no tuition charge. The course is held at the Hyatt Place Dulles North Hotel in Sterling, Virginia (near the Washington/Dulles International Airport). A copy of the application form is reproduced on the last page of this issue of *Microgram Bulletin*. Completed applications should be mailed to the Special Testing and Research Laboratory (Attention: J. Head) at 22624 Dulles Summit Court, Dulles, VA 20166. For additional information, call (703) 668-3349.

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SCIENTIFIC MEETINGS

Title: American Academy of Forensic Sciences 2011 Annual Meeting

Sponsoring Organization: American Academy of Forensic Sciences

Inclusive Dates: February 21-26, 2011

Location: Hyatt Regency (Chicago, IL)

Contact Information: [See website](#)

Website: www.aafs.org

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DEA State and Local Forensic Chemist Seminar Application			
Name: (PRINT NAME EXACTLY AS IT IS TO APPEAR ON CERTIFICATE)		Title:	
Employer:			
Your Office Mailing Address (include city, state, and zipcode):			Length of Service:
Business Telephone: () -	Business Fax: () -	Date of Application:	
Email Address:			
Education			
College or University	Degree	Major	
Please Check Which Techniques or Equipment Are Used in Your Laboratory			
<input type="checkbox"/>	Color Tests	<input type="checkbox"/>	UV
<input type="checkbox"/>	Column Chromatography	<input type="checkbox"/>	IR
<input type="checkbox"/>	Microcrystal Tests	<input type="checkbox"/>	CE
<input type="checkbox"/>	Thin Layer Chromatography	<input type="checkbox"/>	GC/MS
<input type="checkbox"/>	GC	<input type="checkbox"/>	IR
<input type="checkbox"/>	HPLC	<input type="checkbox"/>	Other (please specify)
Indicate Analytical Problem(s) Nominee Would Like to Have Covered:			
Choice of Seminar Dates:			
1st Choice:		2nd Choice:	
Laboratory Chief/Director:			
Printed Name: _____		Signature: _____	
Title: _____		Date: _____	
Phone: _____			